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60/277,058 19 March 2001 (19.03.2001) US
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- (72) Inventors: **HIRD, Bryn**; 8519 Eagle Creek, Cincinnati, OH 45247 (US). **JANDACEK, Ronald, James**; 8746 Hol- lyhock Drive, Cincinnati, OH 45231 (US).
- (74) Agents: **REED, T., David et al.**; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/074343 A3

(54) Title: **THE USE OF NON-DIGESTIBLE POLYMERIC FOAMS TO SEQUESTER INGESTED MATERIALS, THEREBY INHIBITING THEIR ABSORPTION BY THE BODY**

(57) Abstract: This disclosure relates to compositions comprising an open-celled polymeric foam wherein the compositions are useful for sequestering lipophilic materials present in the gastrointestinal tract, thereby inhibiting the absorption of such lipophilic materials by the body. The disclosure further relates to compositions comprising the open-celled polymeric foam wherein the compositions are useful for ameliorating side effects associated with the use of lipase inhibitors. In a preferred embodiment, this disclosure relates to compositions comprising polymeric foam materials made from high internal phase emulsions, where such foams are useful for sequestering lipophilic materials. Further disclosed are compositions comprising open-celled polymeric foams wherein the compositions are useful for the purpose of sequestering aqueous and/or hydrophilic materials present in the gastrointestinal tract, thereby ameliorating diarrhea. Kits comprising the compositions and methods of using the compositions and kits are also described.

INTERNATIONAL SEARCH REPORT

Int'l	Application No
PCT/US 02/06529	

A. CLASSIFICATION OF SUBJECT MATTER					
IPC 7	A61K31/74	A61P1/00	A61P1/12	A61P3/04	A61P3/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

BIOSIS, MEDLINE, EPO-Internal, FSTA, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 51408 A (PARK KINAM) 19 November 1998 (1998-11-19) abstract page 57, line 15-25 ---	1-3,7-10
X	DE 199 42 365 A (BEISEL GUENTHER) 15 March 2001 (2001-03-15) the whole document ---	1-3,7-10
E	EP 1 214 934 A (WILLMEN HANS RAINER ;RATJEN WERNER (DE)) 19 June 2002 (2002-06-19) abstract claims 1-7,30 ---	1-3,7,8
X	WO 01 17377 A (BEISEL GUENTHER) 15 March 2001 (2001-03-15) claims ---	1-3,7-10
	-/-	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the Invention
- *X* document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the International search	Date of mailing of the International search report
19 November 2002	28/11/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel: (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Skjöldebrand, C

INTERNATIONAL SEARCH REPORT

Inte	nal Application No
PCT/US 02/06529	

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 901 792 A (SUWELACK SKIN & HEALTH CARE AG) 17 March 1999 (1999-03-17) abstract ---	1-3,7-10
X	MARKOVA E A: "TREATMENT OF ALIMENTARY OBESITY WITH OXYGEN FOAM" VRACHEBNOE DELO, vol. 6, 1971, pages 106-108, XP001120225 ISSN: 0049-6804 abstract ---	1,2,7,8
X	US 6 048 908 A (KITAGAWA NAOTAKA) 11 April 2000 (2000-04-11) column 15, line 3-7 ---	1-4
A	US 5 650 222 A (DYER JOHN COLLINS ET AL) 22 July 1997 (1997-07-22) cited in the application the whole document ---	1-10

INTERNATIONAL SEARCH REPORT

national application No.
PCT/US 02/06529

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 7–9 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

2. Claims Nos.: 1–10 (in part) because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-10 (in part)

Present claim 1 relate to a composition defined by reference to a desirable characteristic or property, namely "a non-digestible, non-absorbable, open-celled polymeric foam"

The claims cover all compositions having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compositions. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the composition by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. The above objection is also valid for dependent claims 2, 3, 5, 6 and claims 7-10, insofar as they rely on the above definition of the composition.

Moreover, "sequestering one or more lipophilic materials present in the gastrointestinal tract of the animal" relates to the mode of action of the agent, and is not a clear description of a disease (Art. 6 PCT).

Consequently, a full search could only be carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the use of HIPE foams (claim 4) in the treatment of the disorders listed in claim 8.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT
Information on patent family members

Inte
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PCT/US 02/06529

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International Application No

PCT/US 02/06529

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5650222	A	NO 973183 A	10-09-1997
		TR 9700617 T1	21-02-1998
		WO 9621680 A1	18-07-1996
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